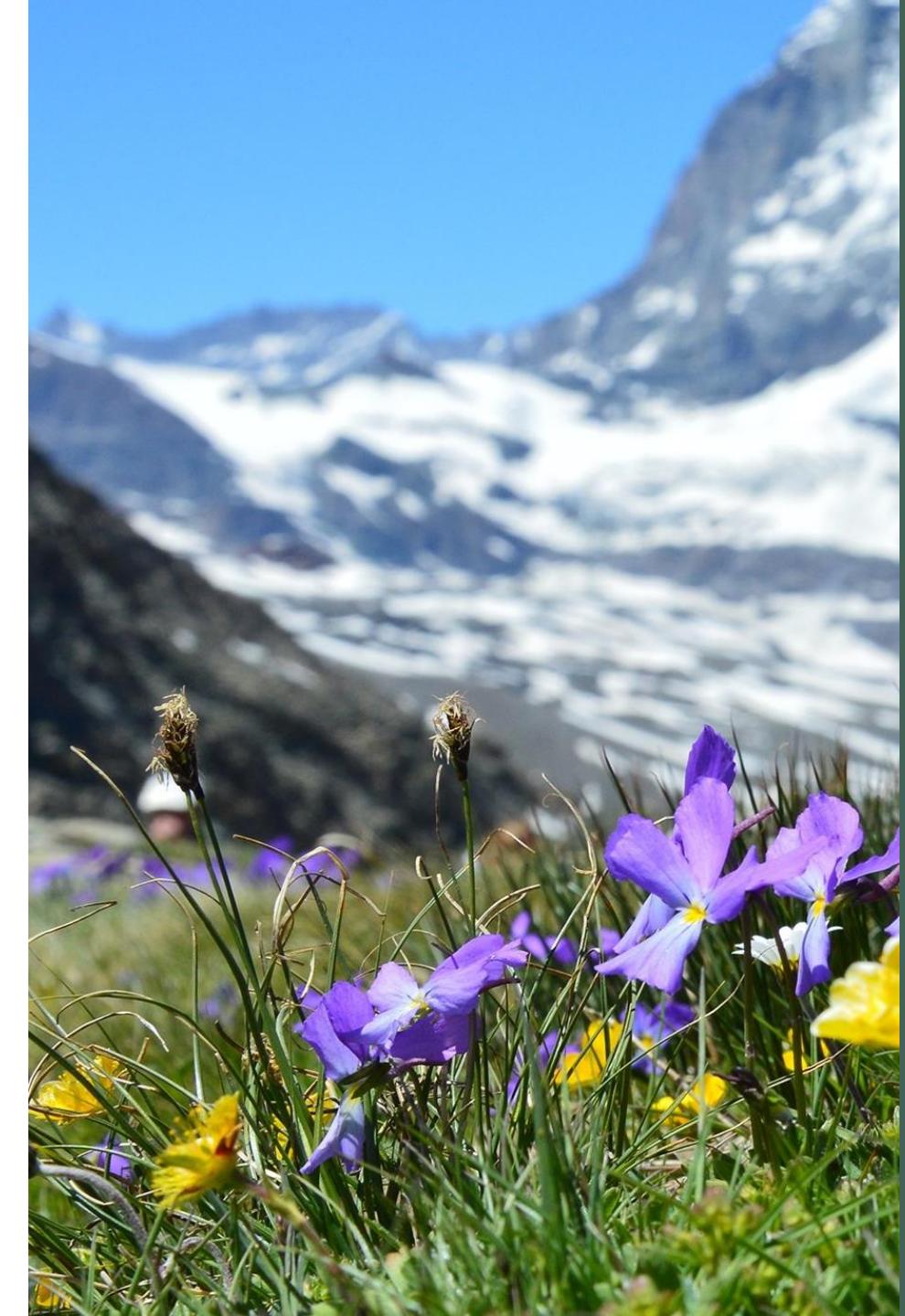
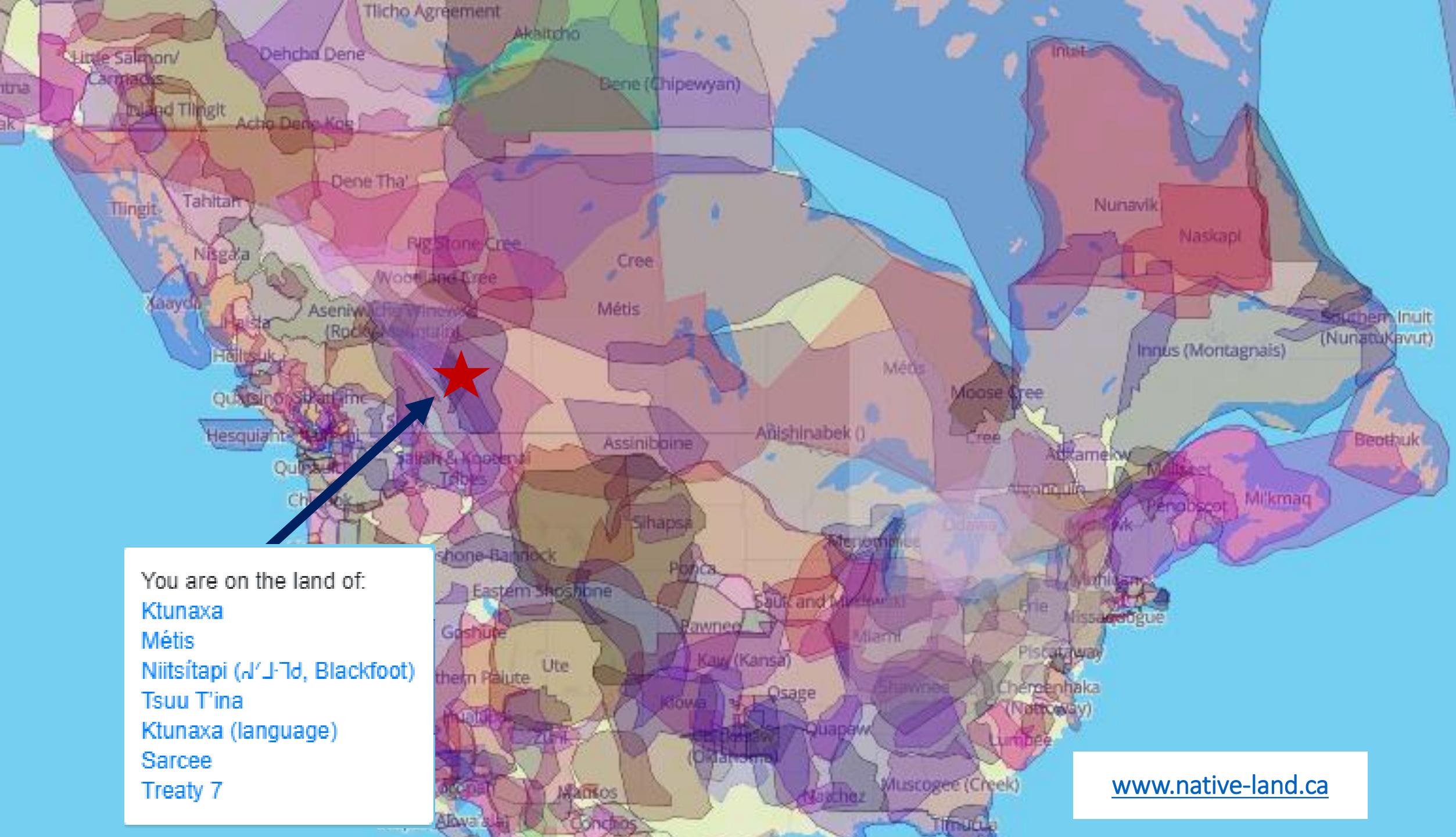


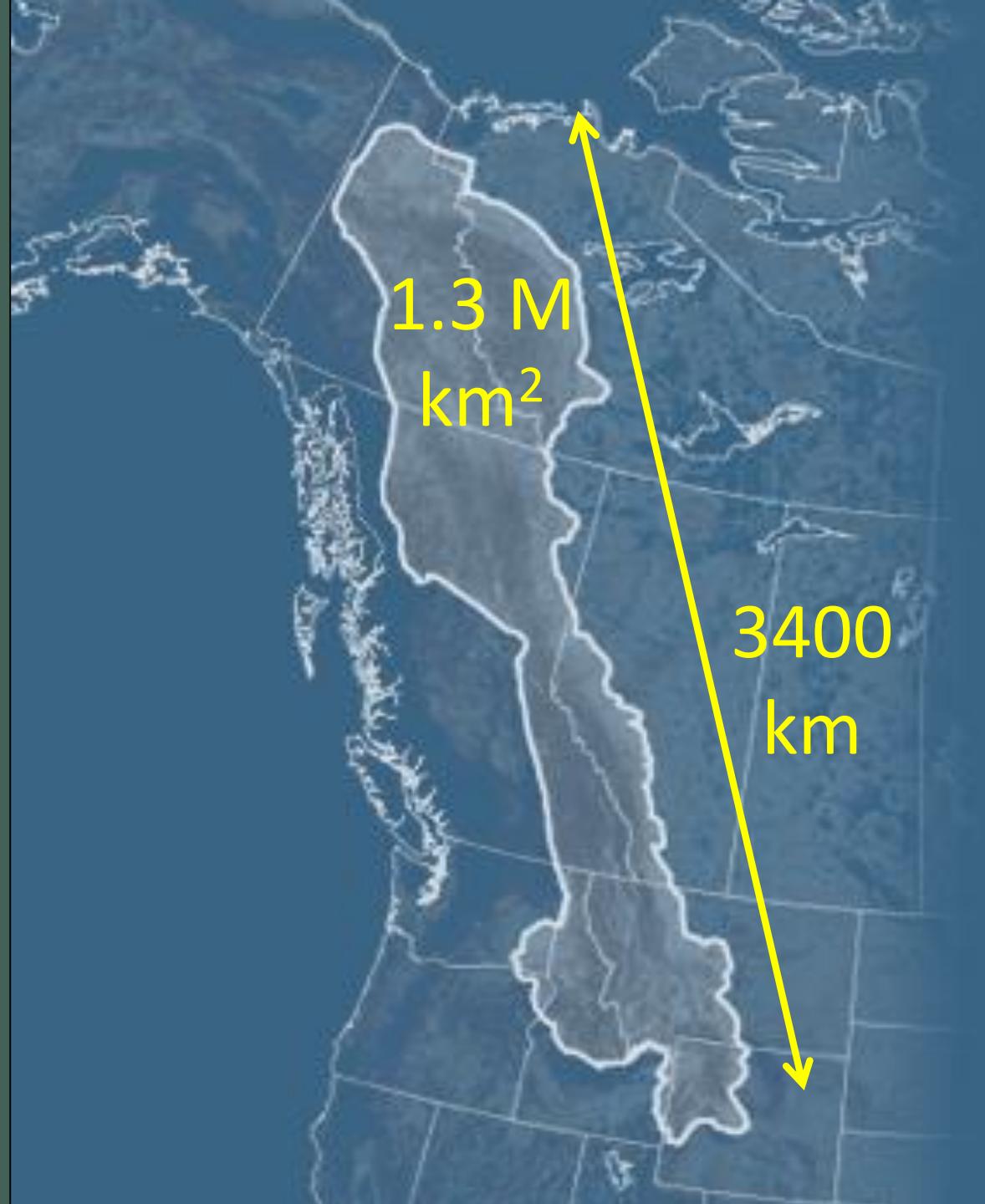
ALBERTA'S EASTERN SLOPES AND THEIR VALUE BEYOND COAL

PRESENTED BY: CPAWS NORTHERN &
SOUTHERN ALBERTA, Y2Y CONSERVATION INITIATIVE



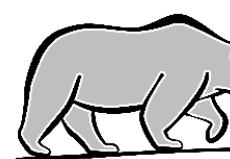


You are on the land of:
Ktunaxa
Métis
Niitsítapi (ᓈᐱ tako, Blackfoot)
Tsuu T'ina
Ktunaxa (language)
Sarcee
Treaty 7



Y2Y's MISSION

To protect and connect habitat from Yellowstone to Yukon so people and nature can thrive.



Yellowstone to Yukon
Conservation Initiative

Y2Y: ABOUT US

We are the only organization dedicated to securing the long-term ecological health of this 3,400-km-long region.

With a scientific and collaborative approach, we highlight and focus on local issues that have implications for the region, and work with key people to stitch together this landscape.



The Canadian Parks and Wilderness Society

Southern Alberta Chapter, and Northern Alberta Chapter

Nation-wide, charitable non-profit organization

Since 1963 has led in achieving the creation of two-thirds of Canada's protected areas

The only charity in Canada focused solely on protecting public lands and waters





- Two chapters in Alberta started more than 50 years ago, CPAWS Southern Alberta and CPAWS Northern Alberta
- Use science-based evidence to collaborate with government, industry, and Indigenous communities to find conservation solutions on our shared landscape
- Work to conserve and protect wilderness and healthy ecosystems in Northern Alberta





Topics of Discussion

1. Introduction
2. Biodiversity and ecological connectivity
3. Water quality, water quantity, and at-risk trout
4. Cumulative effects and caribou
5. Ecosystem services (nature's benefits to people)
6. Conclusion

Key take-away:

No further coal exploration or development should be permitted on the Eastern Slopes

Why?

- *The inherent value of the Eastern Slopes only exists with the landscape remaining intact;*
- *The headwaters and landscapes of the Eastern Slopes are critical to the future of our province;*
- *The negative impacts of coal mining on the environment, human health, animal health and existing economies outweigh any benefits.*



Biodiversity and Connectivity

PRESENTED BY: HILARY YOUNG, PhD
SENIOR ALBERTA PROGRAM DIRECTOR
Y2Y CONSERVATION INITIATIVE

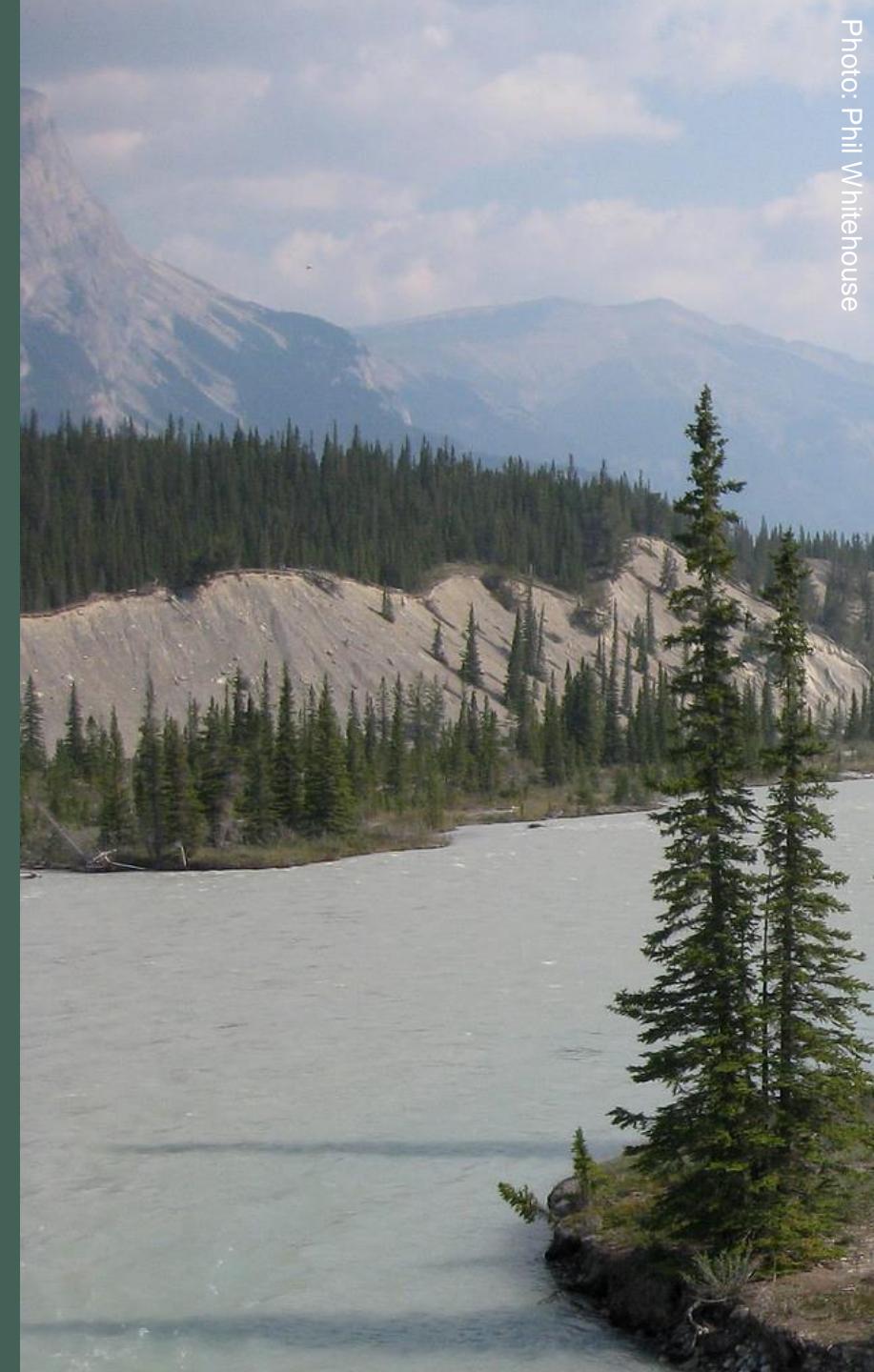


Photo: Phil Whitehouse

REMAINING WILDERNESS:

■ Terrestrial

■ Marine

Watson et al. 2018 Nature

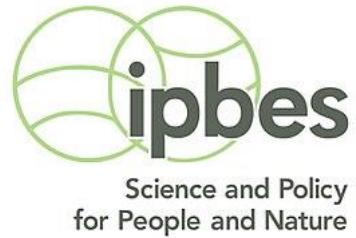


>77% of land (excluding Antarctica) and **87% of ocean** have been modified by direct effects of human activities



- Nature is declining globally at rates unprecedented in human history
- Around 1 million animal and plant species are now threatened with extinction
- Human well-being is at risk

May 2019

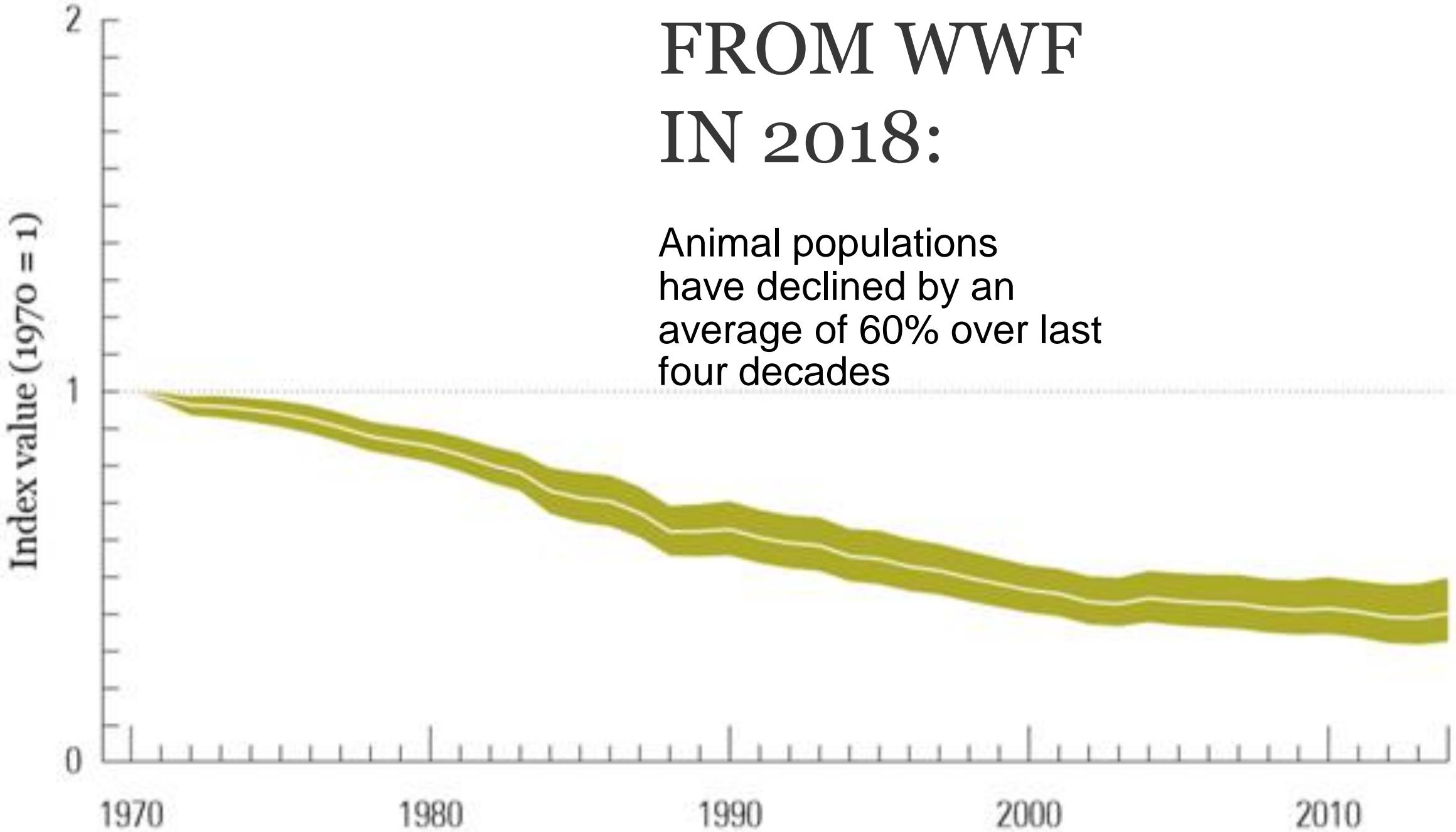


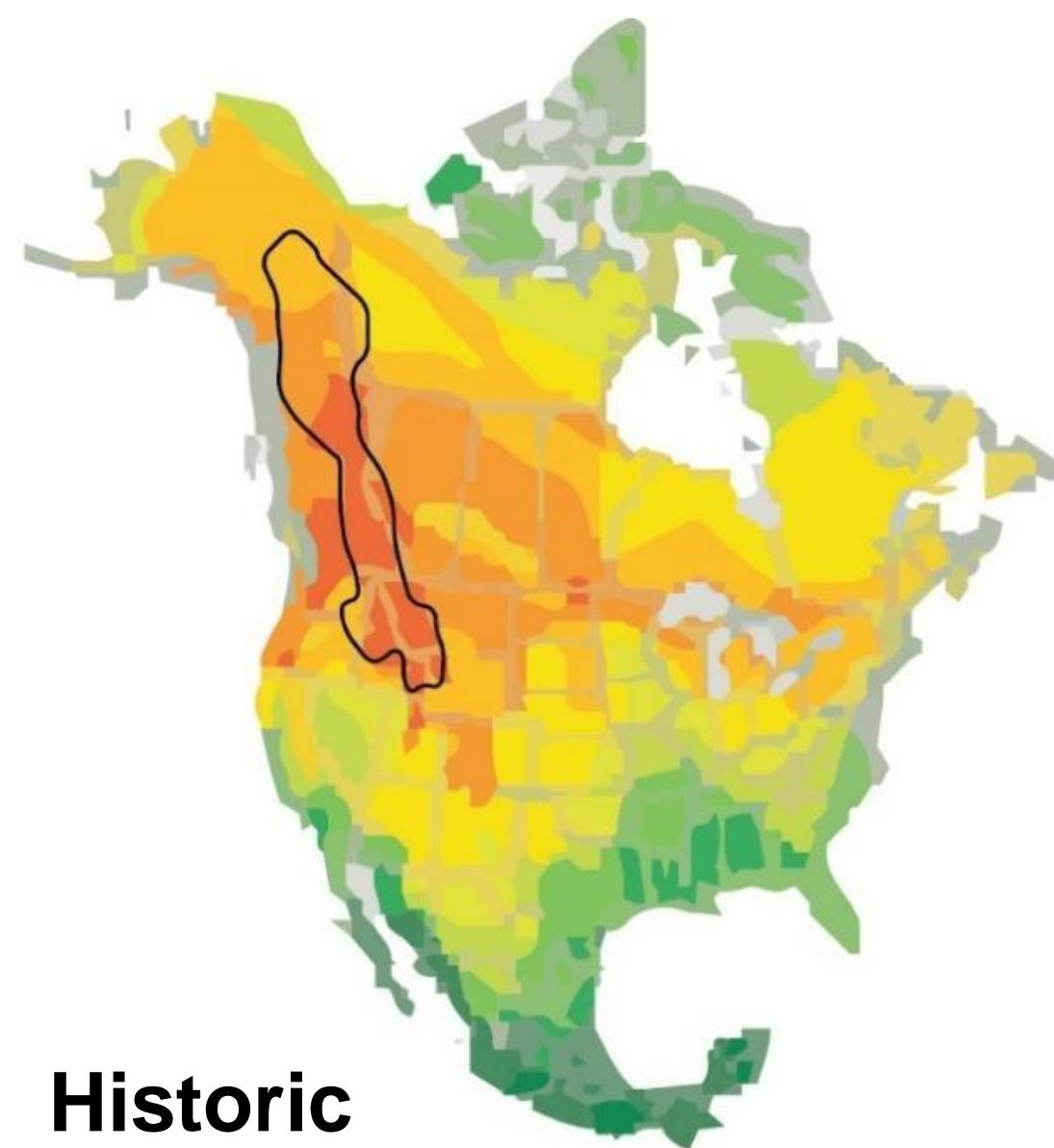
- USD \$24 trillion/ yr = economic value of land-based ecosystem services in the Americas
- BUT two-thirds are in decline

March 2018

FROM WWF IN 2018:

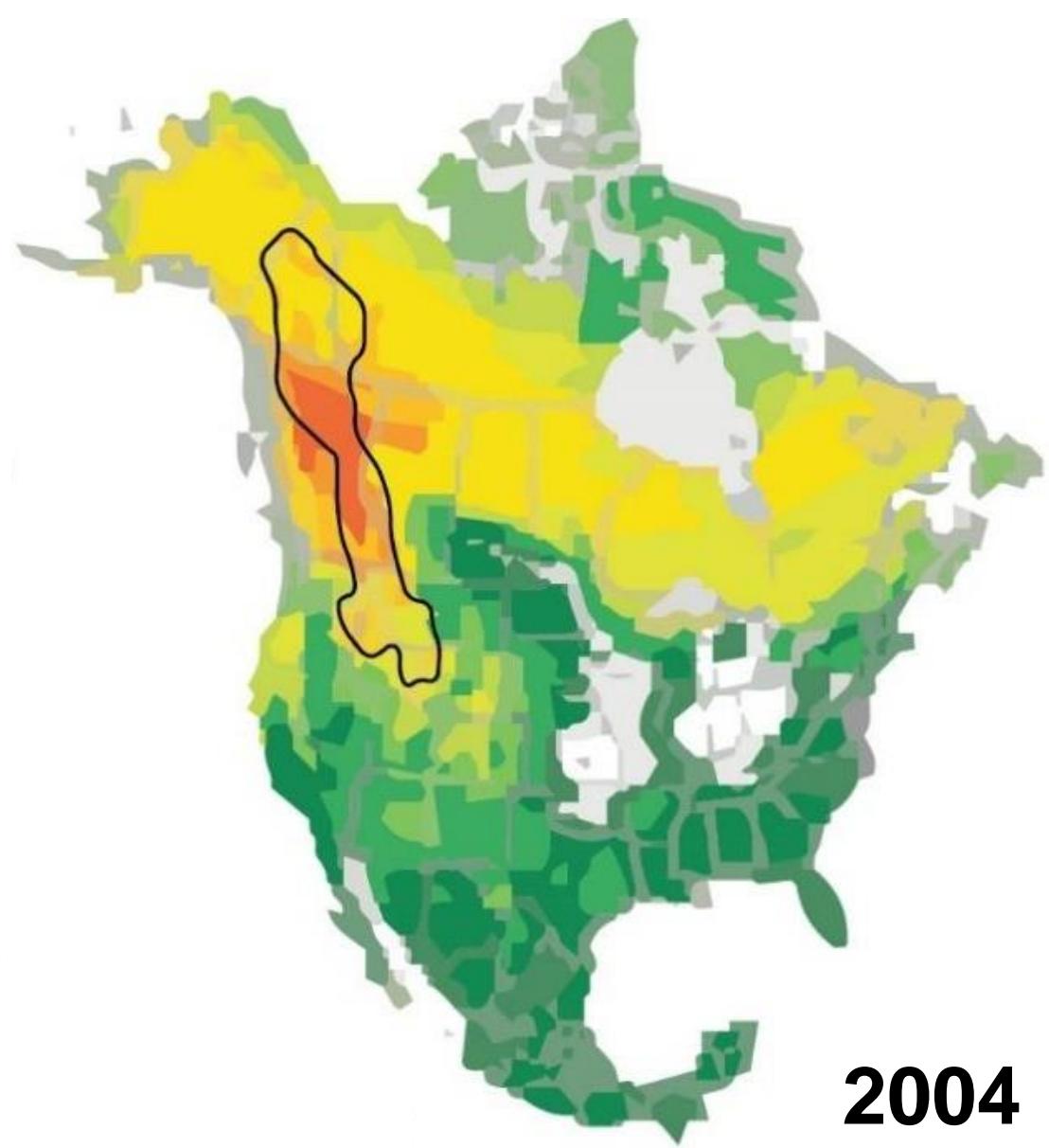
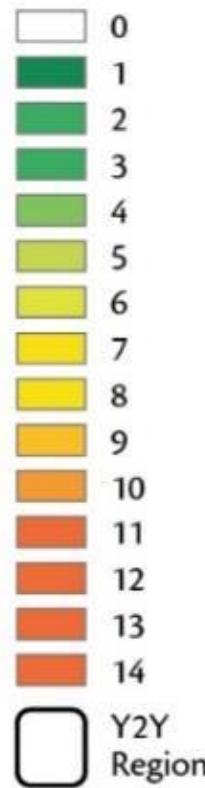
Animal populations
have declined by an
average of 60% over last
four decades





Historic

species



2004

Shrinking ranges of large mammals

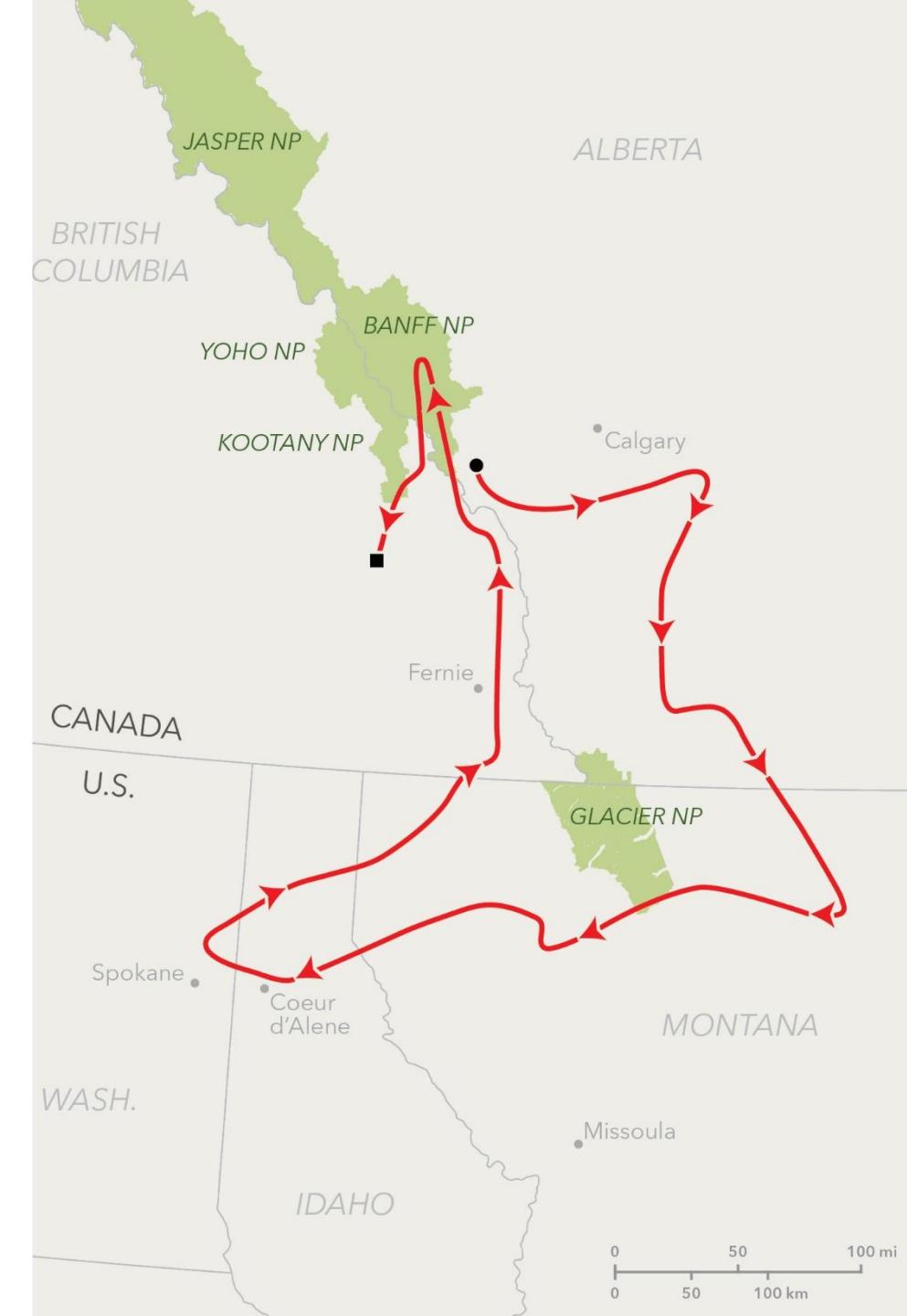
Laliberte & Ripple 2004

A wolverine is shown walking through deep, dark blue-toned snow in a forest at night. The animal's dark brown fur is visible against the white snow. The background is dark and out of focus, showing more of the snowy landscape and some tree branches.

What we have in the Rocky Mountains is rare: an almost complete representation of ***all native large mammals*** that roamed the great hills before Europeans arrived.

– Dr. Paul Paquet

In 1991, Pluie the wolf
went for a very long walk
- across 100,000 km²



Why are the
Eastern Slopes
important for
connectivity?

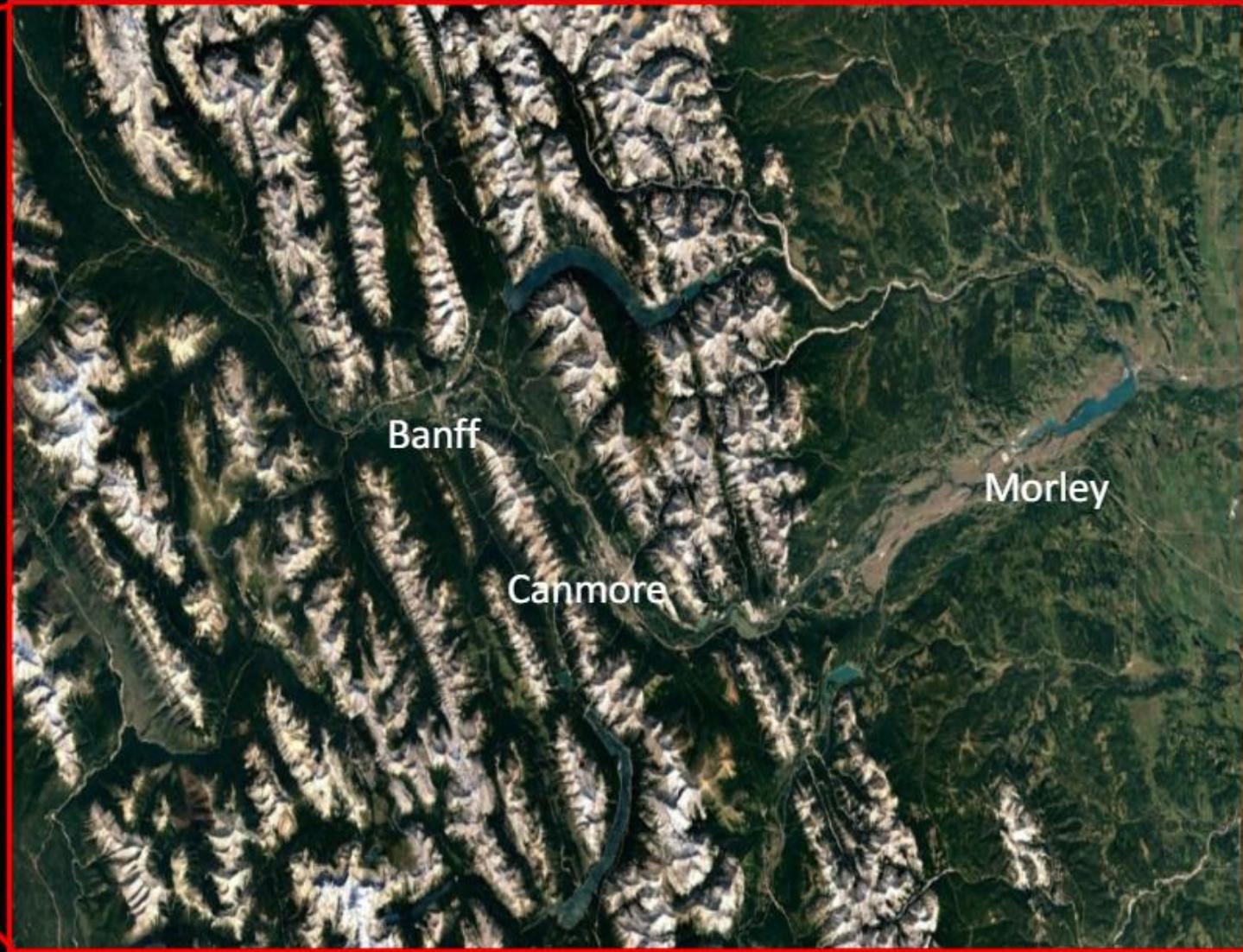
*Four major east-
west connections
across Canadian
Rockies*

Athabasca Valley

Bow Valley

Crowsnest Pass

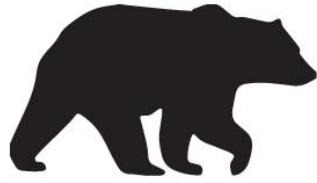
Zooming in on just one valley: the Bow Valley



The Eastern Slopes are highly biodiverse



Grande Prairie



Grizzly bears



Coal mining threatens
both habitat &
connectivity



Grizzlies and linear disturbances

Road densities of over 0.6 km/ km² have a negative impact on grizzly populations

Industrial roads (forestry, mining, oil) negatively impact habitat use, movements, home range selection, survival, and reproductive rates
(Stenhouse et al. 2020)

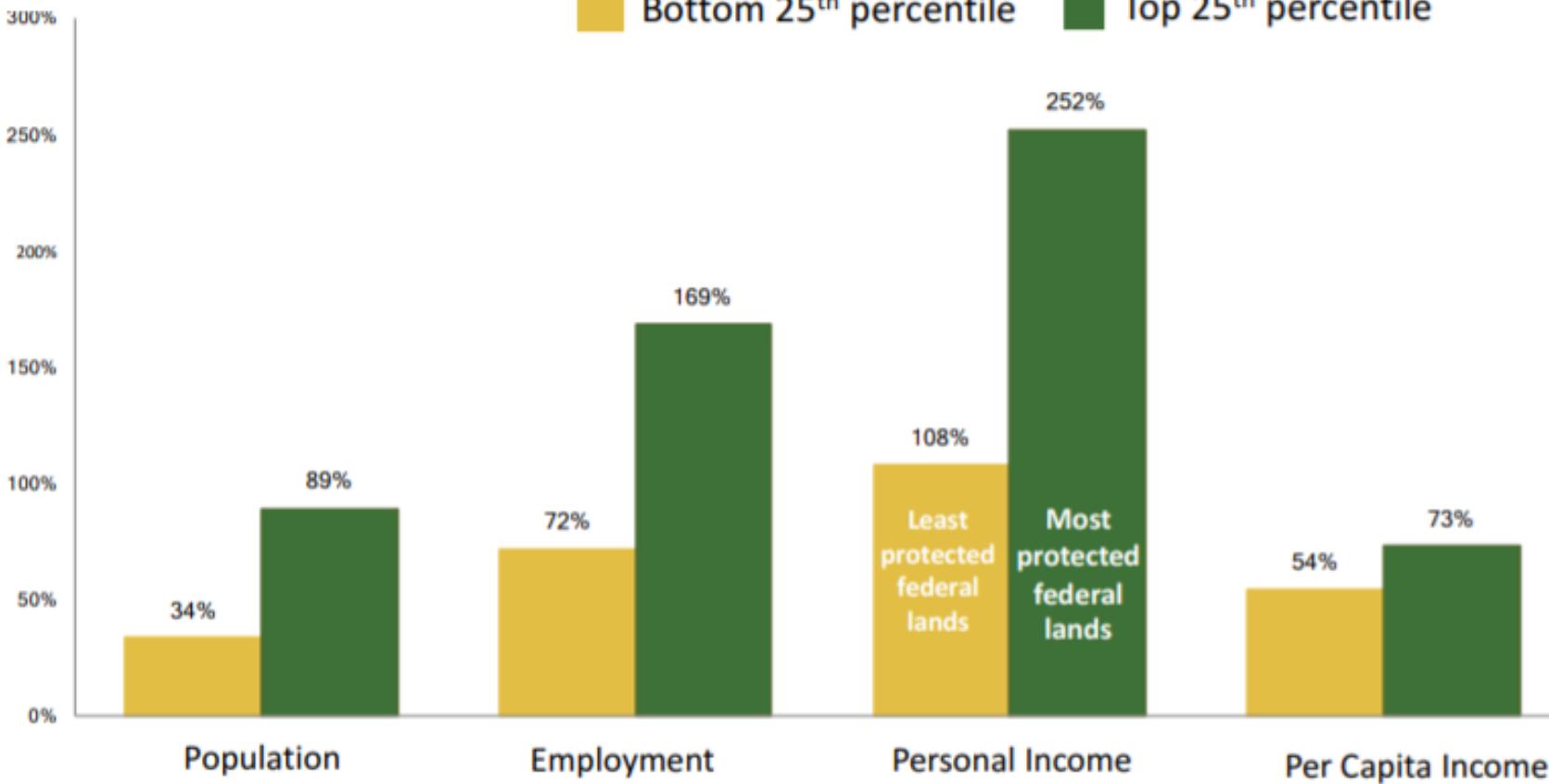
Roads in high-quality grizzly habitat have the largest impact

Counties with more protected federal lands grow faster

Average growth
1970-2015

County share of PROTECTED federal land in rural western
counties:

Bottom 25th percentile Top 25th percentile



Pre-1993



After 2018



G7 Environment Ministers

May 21, 2021



We commit to champion ambitious and effective global biodiversity targets... **by 2050, biodiversity is valued, conserved, restored and wisely used**, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people....

...recognising that Indigenous Peoples, and local communities, are full partners in the implementation of this target.

We will help set the world on **a nature positive and climate-resilient pathway to bend the curve of biodiversity loss by 2030**.

